

U.S.S.N. 10/791, 605

**Claim Amendments**

Please amend claims 1-3, 5, 8-9 as follows:

Please cancel claims 6 and 7 as follows:

Please add new claims 20-22 as follows:

**Listing of Claims**

1. (currently amended) A method of modifying a shipping date forecast of a product manufactured in a fabrication facility to improve an efficiency of utilization of a manufacturing capacity comprising the steps of:

using previously determined fabrication performance data to develop a baseline recovery trend parameter, wherein the recovery trend parameter operates to modify a pre-defined efficiency value of the fabrication facility to generate a ~~an accurate push out~~ modified shipping date forecast for fabricated products fabricated within the fabrication facility;

generating a plurality of second recovery trend parameters based on said first recovery trend parameter to generate a plurality of modified shipping date forecasts;

comparing an actual shipping date to said plurality of modified shipping date forecasts to determine a relative accuracy value of said baseline and said second recovery trend parameters;  
and,

performing regression analysis on said relative accuracy values to determine an optimal recovery trend parameter to make future shipping date forecasts to improve utilization of a manufacturing capacity of said fabrication facility.

2. (currently amended) The method of claim 1, wherein the recovery trend parameter is ~~dynamic~~ updated periodically.

3. (currently amended) The method of claim 1, wherein the pre-defined efficiency value of the fabrication facility is a turn rate, wherein the turn rate equals a ratio of actual products fabricated to forecasted products fabricated within the fabrication facility.

4. (original) The method of claim 1, wherein the fabrication facility is a wafer fabrication facility, and wherein the products fabricated are wafers disposed within a plurality of wafer lots.

5. (currently amended) The method of claim 1 ~~[[4]]~~, wherein the baseline recovery trend parameter equals a number of recovery days divided by the sum of a number of remaining days plus the number of recovery days, wherein the recovery days are a number of additional days needed to process a lot beyond an originally

U.S.S.N. 10/791, 605

forecasted shipping date, and wherein the remaining days are the number of days between a current date of processing a lot within an order and an originally forecasted shipping date.

6. (canceled)

7. (canceled)

8. (currently amended) The method of claim 1 ~~[[6]]~~, further comprising the steps of: wherein said plurality of second recovery trend parameters is generated

~~generating the plurality of associated second recovery trend parameters by adding at least one multiple of a constant factor to the baseline recovery trend parameter; and~~

~~generating the plurality of associated second recovery trend parameters by adding at least one multiple of a constant factor to the baseline recovery trend parameter.~~

9. (currently amended) The method of claim ~~[[6]]~~1, further comprising the steps of: ~~generating a~~ wherein said plurality of second recovery trend parameters ~~from a previous date is~~ generated by adjusting the baseline recovery trend parameter by a

U.S.S.N. 10/791, 605

statistical sigma variation of said baseline recovery trend parameter.

10. (withdrawn) A method of determining an optimal recovery trend to generate at least one push out date comprising the steps of:

a) determining a plurality of POD dates from a pre-defined system date until an actual shipping date for each lot being processed within the facility occurs using a plurality of variables selected from a current system date, a number of remaining days, a turn rate, and a recovery trend parameter, wherein the formula used to calculate each of the POD dates equals current system date+(remaining days\*( turn rate+recovery trend));

b) determining a total accuracy of each recovery trend parameter used to predict an accurate POD associated with all associated lots upon shipping a plurality of lots associated with an order to at least one customer during an associated shipping date;

c) performing a regression analysis on a generated recovery trend parameter accuracy graph to generate an associated recovery

U.S.S.N. 10/791, 605

trend parameter accuracy curve; and

d) determining an optimal recovery trend using the associated recovery trend accuracy curve.

11. (withdrawn) The method of claim 10, wherein the step of determining an optimal recovery trend using the associated recovery trend accuracy curve comprises the step of:

locating a maximum point on the recovery trend accuracy curve, wherein the maximum point on the curve indicates a maximum total accuracy of an optimal recovery trend parameter, and wherein the optimal recovery trend parameter for the shipping week having the associated plotted recovery trend values is determined by further performing the step of associating a maximum point on the Y axis of the recovery trend accuracy curve with an associated point on the X axis of the recovery trend accuracy curve.

12. (withdrawn) A method of determining an optimal recovery trend comprising the steps of:

a) determining a plurality of POD dates from a pre-defined

U.S.S.N. 10/791, 605

system date until an actual shipping date for each lot being processed within the facility occurs;

b) verifying the accuracy of each of a plurality of determined recovery trend parameters used to determine each of the plurality of POD dates;

c) determining a total accuracy of each recovery trend parameter used to predict a correct POD for all associated lots upon shipping a plurality of lots associated with an order to at least one customer during an associated shipping date;

d) generating a recovery trend parameter accuracy graph;

e) performing a regression analysis on the generated recovery trend parameter accuracy graph to generate an associated recovery trend parameter accuracy curve;

f) determining an optimal recovery trend using the associated recovery trend accuracy curve.

13. (withdrawn) The method of step 12 comprising the steps of: calculating each of the plurality of POD dates using a plurality of variables selected from a current system date, a number of

U.S.S.N. 10/791, 605

remaining days, a turn rate, and a recovery trend parameter, wherein the formula used to calculate each of the POD dates equals current system date+(remaining days\*(turn rate+recovery trend)).

14. (withdrawn) The method of claim 13, further comprising the step of: determining a value for a baseline recovery trend parameter.

15. (withdrawn) The method of claim 13, using the optimal recovery trend as a baseline recovery trend parameter for a future date.

16. (withdrawn) The method of claim 14, further comprising the step of: calculating a plurality of recovery trend parameters associated with each lot being processed using the baseline recovery trend parameter.

17. (withdrawn) The method of claim 16, further comprising the steps of:

associating a lot with a plurality of calculated POD dates and with each of the plurality of recovery trend parameters to determine the success of using each recovery trend parameter to



U.S.S.N. 10/791, 605

predict a correct POD.

18. (withdrawn) The method of claim 12, further comprising the steps of:

plotting a total accuracy associated with each recovery trend parameter on a Y axis of the recovery trend parameter accuracy graph; and

plotting each associated recovery trend parameter having an associated total accuracy on an X axis of a graph.

19. (withdrawn) The method of claim 12, comprising the step of: repeating steps 12a)-e) upon completing step 12f).

20. (new) The method of claim 1, wherein said step of comparing comprises generating a curve comprising a plot of said accuracy value of said baseline versus said second recovery trend parameters.

21. (new) The method of claim 1, wherein said optimal recovery trend parameter is determined by selecting a maximum accuracy point on said curve.

U.S.S.N. 10/791, 605

22. (new) The method of claim 1, wherein said optimal recovery trend parameter is determined by determining a slope of said curve.